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ABSTRACT

As part of Bloomfield College's response to the conflict between a liberal arts tradition and careerism, with its attendant faculty, student, and curriculum problems, the Freshman Core Program was developed. One of the principle objectives of the program is to integrate liberal arts values with career education objectives. A set of four Interdisciplinary Studies (IDS) courses are required of all day students. They are supplemented by other courses, seminars, workshops, tutorials, and advising, all of which emphasize a skill/cognitive development approach. One set of courses concentrates upon literature and social sciences in a two-semester sequence; another upon math and the natural sciences. Teachers representing a variety of disciplines work together in these courses to emphasize that the disciplines have common concerns: to read material and observe carefully, to follow a theme or argument, to synthesize elements, and to express one's understanding clearly. Each sequence relies on small group discussions or laboratories, almost to the exclusion of lectures. Tightly integrated into the IDS courses is a Learning Support Workshop, which involves student assessment and placement, and provides help to those with basic skill deficiencies. The program has met many of its objectives in the area of student academic improvement. (AYC)

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TAPPING THE POTENTIALS OF INTERDISCIPLINARY STUDIES

IN A FRESHMAN CORE PROGRAM

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This article will discuss an innovative interdisciplinary Freshman Core Program that has been in operation for six years at a small liberal arts college in the New York metropolitan area. The significance of this program extends beyond the campus of Bloomfield College, for it exemplifies one way to meet productively some of the serious issues now confronting higher education across the country. Before examining this program, let me introduce you to this college and its precarious position at the start of its second hundred years of existence.

In what now looks like an understatement, Fred Hechinger commented in writing about educational crises in the seventies that little Bloomfield College was manifesting in exaggerated fashion the big problems facing higher education in this decade. In 1973 plans for an expanded campus collapsed as student population dropped by 50%. The Board of Trustees moved decisively to manage retrenchment by eliminating tenure throughout the College and retaining only those faculty deemed necessary by a Faculty Council's analysis of requisite positions. The AAUP then sued the College on the grounds that financial exigency was insufficient to warrant dismissing tenured faculty. After the AAUP won its suit, the College went bankrupt and operated under Chapter 11 for several years. An anxious, demoralized and polarized faculty found that not only did it have many fewer students, but that the quality had declined proportionate to the quantity. Mean scores of student ability dropped from above 40% (i.e. in terms of standardized test scores, nearly 60% of college students nationwide scored higher) to below 20%. Faculty faced heterogeneous classes with large proportions of non-traditional students. Mean reading and writing scores were at the 9th grade level. Combined mean SAT scores were below 800. Most students were poorly prepared by high schools for college. More than half our freshmen came from minority groups and from ghetto schools. An increasing number of students have ESL problems, coming from strong ethnic backgrounds and/or foreign countries.

These new students primarily came to college for jobs. Most have chosen to major in business, accounting or nursing. Pressure to drop general requirements has led to distributional choice of

liberal arts courses, which in fact permits more concentration in career courses. Thus the liberal arts tradition has been shrinking. For example, a strong religion department in this Presbyterian College that only fifteen years before had a seminary has been reduced to one man who works half-time in the library. Also diminishing are philosophy, foreign languages, and physics majors as well as a host of other upper division courses in traditional disciplines.

Many faculty have been unhappy about their losses, resentful of the new type of students, apprehensive of the future and their jobs, and frustrated by administrative pressure to teach well all students whom the College has managed to recruit. The plight of the College for some time resembled that of "Our Gal Sunday." Can a little college so unprepared for crises survive in the press of issues in the world of the seventies? The answer now seems to be: yes. In many respects the College, now three years out of Chapter 11, is stronger than it was five years ago. The point of this article is not to advertise recovery but to set the context within with our interdisciplinary program has evolved.

While the story of Bloomfield College is not typical, there are certainly features of it that suggest it has been confronting issues commonly found in higher education. These issues include the unresolved conflict between a liberal arts tradition and careerism, the clash of expectations between traditional faculty and non-traditional students, the enormous pressures put upon teaching and the teaching/learning process as a result of widespread economic problems, the fragmentation of general education exaccerbated by the increasing competitiveness within academia, and the demoralized state of faculty and students who manifest a lost sense of community and those accompanying symptoms such as a lack of dedication, purpose, and conviction.

Our freshman program can be seen as part of the College's attempt to respond to these issues. In so far as we face common issues underlying our specific problems, then what we have learned from our special program can have general interest. That we have learned much from our response is in part due to an unanticipated windfall

from Washington. In the midst of our crisis, we were fortunate to obtain a very large Federal AIDP grant that totally subsidized this freshman program. It has allowed us to survive, to experiment, reformulate, adapt, and grow during the past six years. The grant greatly lessened economic pressure so that we could concentrate upon substantive educational issues. We have thus been priveleged to have an unusual learning experience, which we are ready to share with others facing similar problems.

The focus of this new program has been directed toward a marked change in the student population, primarily in terms of academic proficiencies and interests. In spite of grave academic deficiencies, most of our students have serious intentions of completing college and moving into "white collar" careers. The question underlying this Core program is: how can we help these students and provide them with a college education at entry point without lowering standards or diluting the quality of higher education? Our answer is articulated in a program carefully adapted to students' needs and aspirations. Equally important to us, and relevant to the mission of this College, is that at least at a lower level the program integrates values of a liberal arts tradition with objectives of career education.

In designing this Core program our aim was to create an integrated, encompassing learning environment, which provides frequent, consistent reinforcement of learning, self-discipline, and development. We did this by constructing a set of four Interdisciplinary Studies (IDS) courses that are required of all day students and which are supplemented by other courses, seminars, workshops, tutorials, and advising. The courses of this central part of the Core bear the name: Analysis and Communication. Throughout the Core we have developed a cognitive skills approach in teaching. The emphasis in all IDS courses is upon skill development. Students are not tested for memorizing content but for ability to reason and communicate. We aim to help students become actively and responsibly involved in their own learning. A measurable objective in these IDS courses has been to bring a majority of our freshmen up to college level performance

in ability to analyze and communicate as well as in basic skills by the end of the first year; another objective is to provide them with a foundation of knowledge and understanding for upper division courses. The following Core description will indicate how we try to achieve our objectives.

On set of courses (IDS 101-102) concentrates upon literature and social sciences in a two semester sequence. Teachers representing various, disciplines, including literature, history, philosophy, political science, psychology, and sociology have worked closely together in these courses. While disciplinary perspectives definitely contribute to the richness of the courses, the differences are less apparent in the classes than in the biweekly faculty development and planning sessions, where teachers discuss the assigned material among themselves. Unlike other interdisciplinary programs where students are exposed to the differences between disciplinary viewpoints, here the emphasis is upon what the disciplines have in common. We share these concerns: to read materials carefully; to reach an understanding of it by following development of theme or argument and by synthesizing various elements in the material to form an appropriate and coherent viewpoint; and to express one's understanding of the material in clear, coherent statements that are supported by evidence. Whether reading a story by Baldwin or Kafka, a play by Ibsen or Albee, a study by Freud, Erikson, or William Whyte, the objectives are the same. Effective performance in all these disciplines involves learning careful observation, competent analytical thinking, individual synthesis, and sustained communication that elicits and learns from feedback. In addition to developing cognitive skills students learn work habits for effective learning and acquire a sense of responsibility for their own learning.

Another two semester sequence (IDS 103-104) concentrates upon math and natural science. Again the teachers represent a variety of disciplines; but their emphasis in class is upon essential elements in scientific discovery, thinking and reporting. The method of teacning stresses learning by experimentation. Analysis

and Communication set the framework; the objectives include learning by carefully examining evidence, discovering basic structures and ingredients and how they work, testing formulations, developing quanitative skills, and arriving at analytical understanding based on one's own work. In all IDS courses, there is consistent emphasis upon careful observation, drawing conclusions based on evidence, seeing connections, and communicating one's understanding clearly and effectively.

We recently tried another innovation with a group of thirty-five students who have been totally involved in a more concentrated interdisciplinary track that has been built around Bronowski's written text and the TV series THE ASCENT OF MAN. While there have been serious problems with the text (not so much because of difficulty as because of the author's biased and superficial treatment) the basic results of the experiment have encouraged us to start planning an even tighter integration of all four courses. In this experiment, professors of chemistry, literature, and history have worked closely as a team with the students, emphasizing skill development along with understanding of difficult materials. It has been proven to be extremely useful to have professors of humanities reinforce objectives in science labs and vice versa. Again, our inter-disciplinary thrust is in terms of commonality and complementarity rather than differences.

Several years ago we learned that some students had such serious basic skill deficiencies that they could not cope with the course expectations even when provided with three or more hours weekly in structured learning support workshops. So we devised a developmental reading and writing course (IDS 100). Students manifesting serious basic skill problems in the diagnostic tests now administered to all incoming students must take IDS 100 and pass it with a C or better before entering IDS 101. Another developmental course to teach basic math and quantitative reasoning skills has also been designed for our weakest students before being admitted into IDS 103.

Learning to focus upon students' development of advanced skills has led us to utilize a few pedagogical methods and to disgard some of the more conventional ones. For example, even though we have some highly articulate, exciting lecturers, we have virtually eliminated

the lecture method. It has been proven to be the least effective way to achieve our educational goals. Our teaching is done in small classes using either a laboratory experiment approach or small group discussion. Short talks are given when necessary and useful in small classes. Tutorials and individual conferences are also frequently used. While we have experimented with a variety of games and media presentations, we have learned that these too easily divert attention rather than reinforce our objective of active, involved concentration. To newcomers in the faculty our parsimony in methods appears drab. But we have in the past experimented with a rich diversity of approaches and view-points only to find that it satisfied teachers much more than it helped students.

Tightly integrated into our interdisciplinary Core courses is a vigorous Learning Support Workshop. Students are given diagnostic tests upon admission to college by the Workshop personnel. These tests determine where students will be placed in the Core. About 20% of our students are currently placed in the pre-Core developmental courses. Math scores determine placement in particular tracks within IDS 103-104. Scores in reading and writing have indicated whether students should take one or two electives in addition to the Core. All students are required to participate in weekly workshops until they test out of it. The workshops are part of the courses. The workshop personnel are active in planning and evaluating Core courses. They regularly advise classroom teachers about appropriate materials and approaches and discuss with them basic skill problems. It is in the workshop that students are given help in mastering basic skills in math, reading, and writing to support their learning in the IDS courses. Both workshops and classes utilize a developmental approach. Synchronizing the pace of these two aspects of the Core has been a slow, difficult process; but it is possible to integrate the workshops with significant classroom learning, provided there is frequent communication and cooperation between all involved personnel.

I have been attempting to describe how the IDS Core focuses upon student development. The central part of the Core concentrates

upon development of analytical and communication skills. The Learning Support Workshop is restricted to basic skills. In addition there is a set of optional Life Planning Seminars, which are aimed at developing a student's self-confidence, self-awareness, sense of responsibility for one's own learning, and interpersonal communication skills.

When the Core began we placed more emphasis upon thinking in the courses and upon self-awareness in the seminars. We have learned to place more emphasis upon communication. George Herbert Mead's theory of symbolic interaction has helped to provide a theoretical foundation for our emphasis. He maintained that communication is the basis for both good thinking and a strong self-image. We have learned that our students upon entering college manifest wakness in thinking ability and often a low self-esteem. The growing emphasis given to interpersonal communication and a developmental approach throughtout the Core, and especially in these informal Life Planning Seminars, grows out of our attempt to raise students' sense of self along with their thinking abilities.

Personnel in these seminars have helped teachers become more sensitive to personality and interpersonal factors that can enhance or detract from students' learning. These seminars are being redesigned to give even more support to the Core courses. Similarly academic advising is also being more closely coordinated into the Core with freshman teachers consituting a sizeable number of advisors. The result of this multi-faceted Core is facilitation of student development for college level learning in the freshman year.

One distinctive feature of this Core is the degree of integration of services within it. Another feature is a pronounced

commitment to cognitive skill development in all courses. Usually the term Core signifies a core of knowledge and values that students are expected to acquire as educated men and women. Often this goal has been sought through divisional and interdisciplinary programs. In contrast our program has emphasized not knowledge but know-how. This stance has brought no small amount of criticism from more traditional, disciplinary minded faculty within our College. The criticism has forced us to analyze our own position more carefully.

We believe we have good reason to concentrate on cognitive skill development in a general education program. A common complaint about students today is that they are too passive in the classroom and when doing assignments. They need to become active learners. Absorbing a body of knowledge does not seem to be the most appropriate way to activate them. Taking a tip from Jerome Bruner's cognitive theory that knowledge is a model one uses for dealing with repeated aspects of experience, we emphasize learning how to build cognitive models through observation, generalization, and application - that is, through analysis and communication. Admittedly there are other types of learning, but certainly analytical thinking is fundamental to all sound disciplines of knowledge in the liberal arts tradition. It is also a requirement for careers in the modern world. In writing about the turbulent situation at Harvard, where the notion of a core has again been given serious attention, Susan Schiffelbein commented: "Time and its technology are sweeping us into a future filled with challenges that will require analytical ability even more than operational skills. The 'educated man' who knows isolated facts but cannot apply them will be of little

use in such a future." (Saturday Review, April 1, 1978). We take such a comment as positive reinforcement for our innovative skills' approach.

A much more important reason for continuing to develop a skills oriented Core has to do with how the students who have been involved in it have fared academically and personally. What has been the impact upon our students? In the Spring of 1976 an evaluation report indicated the program had met some of its goals but narrowly missed others. One goal is to have at least 50% of the freshmen students operate on a college level in three areas - math, science, and humanities. The result in 1976 was:

60% achieved college level in Science

47.3% achieved college level in the analytical skills of the Humanities

40% achieved college level in Math.

A more experienced staff did a better job in 1976-77:

60.8% performed overall academic work at college level (111% of goal)

66.8% tested at a college level of math (121% of goal)

65.3% tested to indicate college level knowledge of Science (119% of goal)

65.6% tested to indicate college level knowledge in Humanities.

By self report, students in IDS 102 that year indicated that:

66% made progress in understanding and appreciating the liberal arts.

78% made progress in understanding other people and cultures.

82% made progress in psychological thinking.

The measures for evaluation were both objective (standardized tests and analytical tasks) and subjective (self report through in-depth questionnaires).

The latter evaluations are particularly important; for, our aim is not only skill improvement but also attitudinal and motivational development. It is our belief that a serious hindrance in the education of many students consists of a poor attitude towards themselves as learners. Thus, the following self reports show a significant success in our program:

73% feel better about themselves as students;

86% feel the instructors' criticisms are fair and helpful;

92% feel the instructors are interested in their students;

65% are more interested in reading;

50% are more interested in writing;

63% are more interested in college;

74% believe IDS is helpful in developing skills needed for future courses;

77% report progress in learning basic concepts and how to apply the courses to problem-solving decision making and other life issues.

The students' performance is in accord with their self-perceptions. In a final test of analytical skills in social science in 1977, the majority successfully identified major points. They did slightly better than two control groups consisting of freshmen at a State College where the average SAT scores are 200 points higher than our own. Similar measurements of objective and subjective achievements in subsequent years have been reassuring; but we realize the need to improve our assessment procedures and are attempting to do so.

An outside evaluator rated the IDS Core very highly. In the summary of his evaluation, he pointed out that the IDS core provides a service which we believe constitutes one of our most important functions:

> "Indeed, what IDS does is to provide both definition and balance in the Bloomfield curriculum, perhaps, assuring that what has traditionally been called "General Education: can exist as a viable and vital force for a student body that faculty assume to be obsessed with vocationalism... the IDS component stands out as a process of convincing the student that "Qualifiability" and not mere "employability" is the outcome of any education that respects both the whole person and his/her future."

The evaluator's comments also point to the creative potential of an interdisciplinary program such as this to confront productively major issues in higher education. There are several reasons why an interdisciplinary core can be so adaptive to specific situations and special problems. An interdisciplinary structure is much more flexible than a disciplinary one. A discipline has a specific commitment to a tradition of knowledge and methods, which must be imparted to students. An interdisciplinary program should be respectful

of these traditions. Yet we have found that in IDS we can be freer than disciplines to concentrate upon student development and to cooperate in establishing a common ground in learning. What an insterdisciplinary core can emphasize is the general commitment to highly valued ways of thinking and communicating. It is in this general commitment that we have found our basis for a general education program that stays in tune with changing needs of students and society.

For all its strengths, we are aware that there are several serious deficiencies in this Core. We have given too little attention to the development of critical and reflective thinking. We have tried to build the foundation upon which these higher forms of thinking operate; but if our students at some point do not experience and cultivate critical thinking and mature reflection they will surely not have tasted the ripeness of a liberal arts education. Nor have we fostered creative self-expression, though we have worked to support a basis for it in developing powers of synthesis and communication. There is very little knowledge of the past within our curriculum, though we consistently try to convey a historical approach to understanding reality. In short, we have developed a program that is very good, but far from perfect.

We have learned to be content with modest gains, as we have discovered with bitter disappointment that trying to do too much results in accomplishing very little. Growth for most of our students is a very slow process; we are gratified that we have been able to facilitate that growth as much as we have. What we have done here is not necessarily what will be most appropriate at another place. What we have now may not bee appropriate for Bloomfield College in another five years. But I am convinced that for an effective response to important problems an interdisciplinary framework has the greatest potential for adaptation to specific situations and that it is particularly suitable for an educational program that sets student development as a primary objective.

As mentioned earlier, our interdisciplinary program has enabled us to confront instructively several major issues in higher education. One of these is the conflict between the liberal

arts tradition and career programs. As socio-economic factors put more pressure upon college students to find careers in specialized areas quite separate from those of liberal arts and general studies, a competitive situation has arisen which has put the latter on the defensive and in a seriously weakened position. In contrast to widespread competitiveness, we have learned to specify our learning objectives so that both liberal arts and the career programs are supported. Developed abilities in analytical thinking and communication are required for advancement in both. Our common interdisciplinary goals serve the needs of students to grow as persons and to prepare for careers. In honesty, however, the interdisciplinary program has not lessened the tension. The fluid curriculum of IDS courses makes the Core suspect especially to some career program faculty. Furthermore, we have not given in to the narrowness that is bred by careerism; on the contrary, the development of thinking in the freshman year has led some students to question their original choice of careers and majors. The Core experience has generated only a few ideas for new upper division courses. Yet we increasingly believe that our skills oriented program provides a basis for cooperation rather than a perpetuation of a sterile competition that has become so common place in higher education; very recent events in curriculum and faculty development here are particularly encouraging.

Another issue that we had to confront was the conflict in expectations between traditional faculty and non-traditional students. The vast majority of teachers in the interdisciplinary Core entered it as specialists in their own disciplines. Most of us were distraught by our experiences in the classroom and in grading papers and exams within the changing situation of the seventies. We felt the need for a change in us rather than to sell out and contribute to academic inflation. Faculty in this Core are for the most part highly dedicated to teaching students effectively. We spent months in an intensive faculty development program that ran in conjunction with the emergent Core program; and faculty development has continued to be an instrumental part of this program, with most participating faculty meeting twice each week for sustained training, consultation, planning and evaluation. We see in this situation a challenge to us to learn

new ways to adapt to a situation that is as risky and confusing to us as it is to our students. Along with students we have had to develop skills, such as becoming very clear in establishing our instructional objectives, relating positively to students from cultural backgrounds different from our own, running small group discussions productively, stimulating students to develop a sense of responsibility and study skills, not to mention enticing them to find learning through reading and writing exciting and inherently worthwhile. We found that as we changed our teaching approach to that of co-learners with students in a common situation that is tough, risky, and challenging for all of us, we have begun to bridge the gap that looms large between so many teachers and students.

Another issue that our interdisciplinary program has met constructively is the current demoralization among faculty. Our very heterogeneous faculty members have become a team of collaborators with a common set of objectives, a sense of purpose, and an opportunity for frequent interaction that provides feedback and personal support for effective teaching. One consequence of a highly flexible program is that the process and curriculum are in a constant state of flux in order to keep the Core adapted to the emergent needs of students throughout each year. This means that we regularly have to plan the courses, examine and reset specific objectives, and redefine our curriculum each semester. There is a Pirandello quality to planning meetings; our faculty is constantly in search of a curriculum. From a bureaucratic standpoint constant revision in inefficient; but a more important consequence is that faculty members develop a vital sense of ownership by shaping an evolving program that constantly provides them with a deep sense of satisfaction. Many faculty have commented that participation in the Core program has ended a growing sense of isolation and provided an experience of comraderie not experienced since graduate school. Being involved in this interdisciplinary core is a liberal education for faculty as well as for students and one which facilitates the development of a community of learners.

A fourth major issue confronted by this Interdisciplinary Core program is the fragmentation within general education today. A

common complaint is that liberalizing in the sixties has left the liberal arts tradition in disarray. We have found that our endeavor has overcome much of the brokenness through establishing common goals and finding a common work. The interdisciplinary structure of this Core relieves competitive pressure between disciplines and fosters a sense of cooperation in learning the essentials underlying specialization. When our Core functions at its best, chemists and biologists reinforce the learning in history and literature, just as social scientists and humanists reinforce the learning of careful analysis and generalization required in the natural sciences. What students experience here is not fragmented specialities but a collaborative approach to learning and human development.

By being sensitive to the crisis in our classrooms in the early seventies we put together an interdisciplinary program that is notable for its concentration upon cognitive skills, the integration of disciplines and various suppor services, innovative teaching that is clearly focuses and consistent, close and frequent interaction between participants, openness to adaptation, and a considerable amount of student progress. In so doing we have learned to tap the rich potentials in an Interdisciplinary Core that is reaching both traditional and non-traditional students and at the same time is helping resolve issues threatening the viability of higher education.

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